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10/756,883	01/13/2004	Hiroaki Nakazawa	1232-5250	3443
27123	7590	10/17/2007	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			PATEL, ASHOKKUMAR B	
			ART UNIT	PAPER NUMBER
			2154	
			NOTIFICATION DATE	DELIVERY MODE
			10/17/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOPatentCommunications@Morganfinnegan.com  
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**Office Action Summary**

Application No.

10/756,883

Applicant(s)

NAKAZAWA, HIROAKI

Examiner

Ashok B. Patel

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 1-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____  |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :06/01/05,10/21/05,03/21/07,06/05/07.

### DETAILED ACTION

1. Claims 19-27 are subject to examination. Claims 1-18 have been cancelled.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 19-27 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

#### **Referring to claims 19 and 20,**

Claim 20 recites "The address notification method according to Claim 19, further comprising a test step of conducting a connection test with the first apparatus using the address of the first apparatus, wherein before a result of the connection test in the test step has been obtained, the second apparatus is notified of, as the expiration time of the address of the first apparatus, the expiration time shorter than the expiration time of the address of the first apparatus obtained from the third apparatus.

Thus, considering the dependency of claim 20 on claim 19 and as such inheriting the limitations of claim 19, claim 20 itself defines the initiation of the "test" if "the second apparatus is notified of, as the expiration time of the address of the first apparatus, the expiration time shorter than the expiration time of the address of the first apparatus obtained from the third apparatus" occurs "before a result of the connection test in the test step has been obtained."

Art Unit: 2154

Therefore, the notification method of claim 19 is in itself the beginning or initiation of "a test."

Examiner applies this interpretation to the following rejections.

**Referring to claim 21,**

Claim 21 is rejected for the reasons set forth for claim 20 as above, because of its dependency on claim 20.

**Referring to claims 22 and 23,**

Claims 22 and 23 are claims to a computer program stored in a memory carrying out the method of claims 19 and 20. Therefore claims 22 and 23 are rejected for the reasons set forth for claims 19 and 20.

**Referring to claim 24,**

Claim 24 is a claim to a computer program stored in a memory carrying out the method of claim 21. Therefore claim 24 is rejected for the reasons set forth for claim 21.

**Referring to claims 25 and 26,**

Claims 25 and 26 are claims to an apparatus carrying out the method of claims 19 and 20. Therefore claims 25 and 26 are rejected for the reasons set forth for claims 19 and 20.

**Referring to claim 27,**

Claim 27 is a claim to an apparatus carrying out the method of claim 21. Therefore claim 27 is rejected for the reasons set forth for claim 21.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 22-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

**Referring to claims 22-24,**

Claim 22 recites " computer program". At page 46 lines 25 through page 47, line 26 and in Fig.3, of the instant specification contains intrinsic evidence as the "means" are implemented in a software alone, which may be downloaded from the website(s).

As such the claim 22 is a claim to software, which does not fall into any of the four statutory categories set forth in the above statute. Also, as this software is downloaded, the software is merely electro-magnetic signals and not falling into any of the four statutory categories set forth in the above statute.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 19-27 are rejected under 35 U.S.C. 103(a) as being Unpatentable over Grove et al. (hereinafter 'Grove')(US 2002/0059622 A1) in view of Chang et al. (hereinafter Chang) (US 2006/0020688 A1)

**Referring to claim 19,**

Grove teaches an address notification method comprising, upon receiving a query about an address (Para. [0067] When a client, say 500, requests a web object from www.site.com, the client's browser queries its LDNS server 60 for the IP address of www.site.com. If the LDNS server 60 doesn't have that information in its local cache, it sends a further query to a DNS server which is authoritative for www.site.com. In our case, we assume that it will send the query to the ADNS server 10, because it has previously found and cached a referral to this ADNS server, according to the general and well-known DNS referral mechanism.") of a first apparatus from a second apparatus (Para. [0067], "When a client, say 500, requests a web object from www.site.com, the client's browser queries its LDNS server 60 for the IP address of www.site.com. If the LDNS server 60 doesn't have that information in its local cache, it sends a further query to a DNS server which is authoritative for www.site.com. In our case, we assume that it will send the query to the ADNS server 10, because it has previously found and cached a referral to this ADNS server, according to the general and well-known DNS referral mechanism." Note: www.site.com. is an IP address of a first apparatus and client browser is a second apparatus.), sending a query about the address of the first apparatus to a third apparatus(Para. [0067], "If the LDNS server 60 doesn't have that information in its local cache, it sends a further query to a DNS server which is authoritative for www.site.com. In our case, we assume that it will send the query to the ADNS server 10, because it has previously found and cached a referral to this ADNS server, according to the general and well-known DNS referral mechanism." Note :

Art Unit: 2154

ADNS is the third apparatus.), and notifying the second apparatus of the address of the first apparatus obtained from the third apparatus ([0068] Under a conventional procedure, ADNS server 10 would return the regular IP address 300 to the client's LDNS server 60, which will pass this IP address to the client 500. The client now will contact the server 30 using the regular IP address 300.").

Additionally, Grove teaches at para. [0072] Now we shall consider the fact that every name-to-address resolution record, returned by a DNS server and in particular by an ADNS server, has a validity period parameter commonly called TTL(time to live), either explicitly defined or set by default." (the expiration time of the address of the first apparatus that is obtained from the third apparatus together with the address of the first apparatus. Note: DNS server and ADNS server provides TTL parameter to every name-to-address resolution record which is "explicitly defined.")

Please also note the ability of Grove's LDNS to increase the TTL, that is an expiration time of the address of the first apparatus longer than that of obtained from the third apparatus, revealed at para. [0072], " Namely, if the TTL in a response from an ADNS server to a LDNS server is set to 0, then the LDNS server typically sets it to 5 minutes maximum."

Grove fails to teach "wherein the second apparatus is notified of, as an expiration time of the address of the first apparatus, an expiration time shorter than the expiration time of the address of the first apparatus that is obtained from the third apparatus together with the address of the first apparatus.



Chang teaches at para. [0061] FIG. 5 shows an exemplary connection sequence diagram for an outside client OC to an inside server IS handled by a GSA gateway GSAA. The diagram assumes that a client on the Internet wants to initiate an inventive generalized client-server connection to a server in a private IP network. The client knows the server's hostname, for example, "pcluo.research.att.com," but does not know the IP address of the server.

[0062] The client OC first sends an IP address query message to its default DNS server in step 400. The query message eventually arrives at the border DNS server BD that is responsible for the domain of ".research.att.com." The border DNS server BD then finds that this IP address query is from an external host and the queried IP host is an inside one. In step 402, the border DNS server BD selects a GSA gateway that has the lightest load and returns the public IP address of this GSA gateway to the querying host. The returned IP address is assigned the shortest TTL so that the DNS query result is prevented from being cached by the default DNS server at the client side.

[0063] In step 404, after receiving the IP address query result, the client OC sends a service request message to the GSA gateway GSA using the standard well-known TCP port for the generalized client-server protocol, as if the GSA gateway GSAA were the server host "pcluo.research.att.com."

Please also note the ability of Chang's DNS to decrease the TTL, that is an expiration time of the address of the first apparatus shorter than that of obtained from the third apparatus, revealed at para. [0072],

Because both Grove and Chang teaches the ability of the DNS to either extend the expiration time of the address of the first apparatus or shorten the expiration time of the address of the first apparatus, it would have been obvious to one in skilled in art to substitute one ability for the other, to achieve predictable result of either extending the expiration time of the address of the first apparatus or shortening the expiration time of the address of the first apparatus to control the "DNS Caching" as taught by Chang in para. [0062], "The returned IP address is assigned the shortest TTL so that the DNS query result is prevented from being cached by the default DNS server at the client side."

Here the claim limitation employs the ability to shorten the expiration time of the address of the first apparatus to control the "DNS Caching" as taught by Chang in para. [0062], "The returned IP address is assigned the shortest TTL so that the DNS query result is prevented from being cached by the default DNS server at the client side."

**Referring to claim 20,**

Grove teaches address notification method according to Claim 19, further comprising a test step of conducting a connection test with the first apparatus using the address of the first apparatus, wherein before a result of the connection test in the test step has been obtained, the second apparatus is notified of, as the expiration time of the address of the first apparatus, the expiration time shorter than the expiration time of the address of the first apparatus obtained from the third apparatus.

Considering the dependency of claim 20 on claim 19 and as such inheriting the limitations of claim 19, claim 20 itself defines the initiation of the "test" if "the second

Art Unit: 2154

apparatus is notified of, as the expiration time of the address of the first apparatus, the expiration time shorter than the expiration time of the address of the first apparatus obtained from the third apparatus" occurs "before a result of the connection test in the test step has been obtained."

Therefore, the notification method of claim 19 is in itself the beginning or initiation of "a test."

**Referring to claim 21,**

Grove teaches address notification method according to Claim 20, wherein in the test step, a connection test with the first apparatus is conducted using a protocol corresponding to the address of the first apparatus. (para. [0067], "When a client, say 500, requests a web object from www.site.com, the client's browser queries its LDNS server 60 for the IP address of www.site.com.")

**Referring to claim 22,**

Claim 22 is a claim to a computer program stored in a memory carrying out the method of claim 19. Therefore claim 22 is rejected for the reasons set forth for claim 19.

**Referring to claim 23,**

Claim 23 is a claim to a computer program stored in a memory carrying out the method of claim 20. Therefore claim 23 is rejected for the reasons set forth for claim 20.

**Referring to claim 24,**

Art Unit: 2154

Claim 24 is a claim to a computer program stored in a memory carrying out the method of claim 21. Therefore claim 24 is rejected for the reasons set forth for claim 21.

**Referring to claim 25,**

Claim 25 is a claim to an apparatus carrying out the method of claim 19. Therefore claim 25 is rejected for the reasons set forth for claim 19.

**Referring to claim 26,**

Claim 26 is a claim to an apparatus carrying out the method of claim 20. Therefore claim 26 is rejected for the reasons set forth for claim 20.

**Referring to claim 27,**

Claim 27 is a claim to an apparatus carrying out the method of claim 21. Therefore claim 27 is rejected for the reasons set forth for claim 21.

***Conclusion***

**Examiner's note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Art Unit: 2154

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 6:30 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan A. Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Ashok Patel', with a long, sweeping horizontal line extending from the end of the signature.

Ashok Patel

Examiner

AU 2154